

# Application of Plastic Ball Modification through Teams Games Tournament Learning Model to Improve Volleyball Lower Passing in Class V MI Ath-Thohariyah

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## Abstract:

This study aims to determine the effect of applying modified plastic ball learning media on volleyball underhand passing at MI Ath-Thohariyah. Experimental research is the methodology employed in this study. employing a single kind of experimental study, namely the one group pretest-posttest pre-experimental design. The pupils in class V of MI Ath-Thohariyah will be the population employed in this study. A total of 25 male students from class V MI Ath-Thohariyah made up the sample for this study, which used non-probability sampling. The pre-test average was 49.36 after receiving a plastic ball modification therapy utilizing the Teams Games Tournament technique for 12 meetings, and the post-test score was 82.04, indicating that the rise was 32.68, according to the t test results. Furthermore, the t-count value is 23.43 according to the t-test. 1.71 is the t-table value at a significant level of 5% and a df of 24. It is therefore possible to state that there is a significant increase in the score of the lower passing ability results by being given a plastic ball modification using the teams games tournament method for 12 meetings because t-count > t-table ( $23.43 > 1.71$ ) and the significance value is smaller than 0.05 ( $0.00 < 0.05$ ).

**Keywords:** Passing Down, Student, Volleyball

## 1. INTRODUCTION

Indonesia has known volleyball since 1982 during the Dutch colonial era (Yudiana et al., 2020). Teachers of physical education were brought in from the Netherlands to promote volleyball in particular and sports in general. In addition to physical education teachers, the Dutch army contributed a lot to the development of volleyball in Indonesia, especially by playing in dormitories, open fields and holding matches between the Dutch company itself (Gems & Pfister, 2022). Volleyball is gaining popularity in Indonesia across all social strata, leading to the emergence of clubs in major Indonesian cities. On the basis of this, the first national volleyball tournament was held in Jakarta on January 22, 1955, and the PBVSI (Indonesian Volleyball Association) was founded (Fauzi et al., 2023). PBVSI has since been actively developing activities both inside and outside the country until now. The development of the

volleyball game was very prominent during the lead-up to the 1962 Asian Games IV and the 1963 Ganefo I in Jakarta, both for men and for women.

In 1951, volleyball bouts were added to the official schedule for PON II in Jakarta and POM I in Yogyakarta (Levy & Carmi, 2021). After 1962 the development of volleyball was like mushrooms growing in the rainy season, there were many volleyball clubs in all corners of the country. This is also evidenced by the data on match participants in the national championship. PON and other sports parties, where numbers show an increase in numbers (Aini et al., 2020). It can be said that until now the volleyball game in Indonesia has occupied the third place after soccer and badminton. For the first time in the history of Indonesian volleyball, PBVSI has been able to send the Indonesian youth volleyball team to the World Championship in Athens Greece which took place from September 3-12, 1989. The Indonesian men's junior volleyball team was coached by Yano Hadian with the assistance of trainer Kanwar, as well as Japanese coach Hideto Nishioka, while the physical trainer was handed over to Engkos Kosasih from the coaching field of PKON (national sports health center) MENPORA Office. Two teams, each with two nets separating them, compete in the game of volleyball. Each team consists of six players. One of the most well-liked sports is volleyball (Erdiyanti & Febriyanto, 2019). It is clear from this that volleyball is a team sport played between two

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nets. The object of the game is to pass the ball over the net, which is difficult for players to perform because it needs coordination. In Garut, volleyball is a well developed sport that is enjoyed by both men and women, as well as children and adults. Volleyball is a difficult sport to play since it involves techniques that must be incredibly dependable in order to do all of the game's moves. For this reason, training is essential to achieving success.

To play good volleyball, one must be proficient in a few fundamental moves, including smash, pass, block, and serve (Risma et al., 2020). While all of these strategies are necessary, passing is one of the most crucial fundamental strategies in volleyball. Passing is the act of transferring the ball to teammates using a certain technique in order to set up an attack pattern against the other team (Arif et al., 2021). Therefore, the ability to transfer the ball to teammates using a certain technique to start an attack pattern against an opponent is known as passing ability.

The passing technique consists of 2 types, namely lower passing and upper passing (Suyatno et al., 2023). Both have different levels of difficulty. Receiving the ball with both hands is a move called passing down (Sugito, 2022). Contact on the hand segment above the wrist up to the elbow. This lower passing technique is often used to receive the ball from the opponent's serve. The difficulty often faced by players in mastering this technique is their laziness to practice lower passing because psychologically it is not interesting and impatient in practicing this technique. As a result, the failure of teams in a match is often greatly influenced by the reception of the lower pass.

The lower pass is a fundamental volleyball skill that players should become proficient in (Pratama et al., 2023). The lower pass is used to receive serves and receive attacks from opponents (Azhar et al., 2020). A good lower pass is the first step in organizing an attack, because there is good passing and directing the ball towards the feeder well, the possibility of getting points is very large. If the lower pass is not accurate, then a feeder will find it difficult to feed the ball to the smasher. Lower passing is also used to defend or receive smashes, because the lower passing technique

This study aims to determine the Application of Modification of Plastic Ball Learning Media with TGT Learning Model towards Increasing Volleyball Lower Passing in class V MI Ath-Thohariyah in 2023. The data in this study are in the form of test results of basic volleyball lower passing techniques. The results of the analysis are described as follows:

is the most appropriate technique for defense. A good passing technique is a strong hand position, both hands together, and must always be under the ball (Kristina et al., 2021). If the lower passing technique is done correctly, it is likely that receiving attacks from the opponent will be successful, resulting in a good game and the opportunity to spike to get points will occur.

Based on the above, it shows that the lower passing technique is very necessary to be mastered by volleyball players. The lower passing technique is also decisive in matches, as stated by Drikos et al. (2021) in volleyball games the percentage of passing use is very high, namely approximately 80% when the game takes place. During the game there are three touches, two touches between which must use passing and one blow / smash to attack the opponent. In order for the mastery of basic techniques to be mastered perfectly, it is very necessary to practice continuously, namely by deepening the passing training itself by varying the training model which will affect the improvement of lower passing skills in volleyball games.

## 2. MATERIAL AND METHOD

In solving problems, an appropriate research method is needed, where the research method is a way to solve problems by looking at various symptoms in the past, present and future. The method serves to assist researchers in the process of collecting data that is in accordance with the problem or research question.

The method used in this research is Experimental research. This study uses one type of experimental research, namely preexperimental experiments (Preexperimental Design) with a One Group Pretest-Posttest Design research design. This design has no control group, and subjects are not placed randomly. The advantage of this design is that a pretest and posttest are carried out so that it can be known with certainty the difference in results due to the treatment given (Permadi et al., 2024).

## 3. RESULT AND DISCUSSION

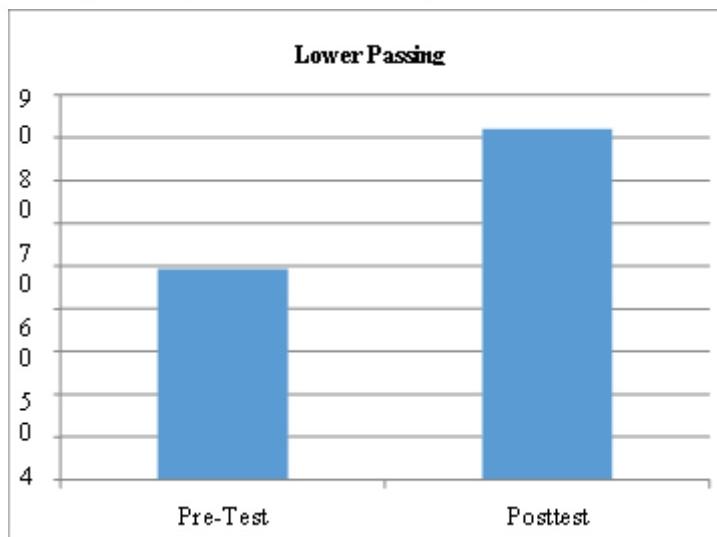
The results of descriptive statistical analysis of pretest and possttest basic passing techniques under volleyball in class V MI Ath-Thohariyah Year 2023 are as follows:

**Table 1.** Description Pretest Posttest

	Descriptive Statistics								
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Sum Statistic	Mean Statistic	Std. Error	Std. Deviation Statistic	Variance Statistic
<b>Pretest</b>	25	25	33	58	1234	49.36	1.648	8.241	67.907
<b>Posttest</b>	25	16	75	91	2051	82.04	1.161	5.806	33.707
<b>Valid N (listwise)</b>	25								

Based on the data in table 1 above, the pretest and posttest of the basic technique of passing under

volleyball in class V MI Ath-Thohariyah in 2023 can be presented in the figure as follows:

**Figure 1.** Comparison of Pretest and Posttest Results of Lower Passing

Based on the diagram above, it shows that at the time of the pretest, the average was 49.36 and increased at the time of the post Basic technique of passing under volleyball in class V MI Ath-Thohariyah Year 2023 test amounted to 82.04. This means that students' lower passes increased after being given practice modifying plastic ball learning media based on the Teams Games Tournament learning model for 12 meetings.

## CONCLUSION

Based on the results of the t-test, it is known that the pre-test average is 49.36 after being given a plastic ball modification treatment using the team games tournament method for 12 meetings, the post-test value is 82.04 so that it is known that the increase is 32.68. Furthermore, based on the t-Test, the t-count value is 23.43. The t-table value with df 24 at a significant level of 5% is 1.71. Therefore,  $t\text{-count} > t\text{-table}$  ( $23.43 > 1.71$ ) and the significance value is smaller than 0.05 ( $0.00 < 0.05$ ) so that it can be stated that there is a significant increase in the score of the lower passing ability given the modification of plastic balls using the teams games tournament method for 12 meetings.

Based on the analysis above, it has been proven that there is a significant difference between before treatment and after treatment in improving the lower passing of volleyball in class V MI Ath-Thohariyah. The thing that causes the influence on lower passing is more influential to the plastic ball media with the teams game tournament learning model because according to the characteristics of elementary school students themselves, lower passing can be influenced by plastic ball media learning with the teams game tournament learning model with moderate intensity. So it can be concluded that learning plastic ball media with a team game tournament learning model can affect the improvement of volleyball lower passing in class V MI Ath-Thohariyah so that students can learn well and master the basic techniques of volleyball lower passing. Learning carried out by students with a short time vulnerability for 4 meetings does not affect too much, so with a plastic ball media learning program with a team game tournament learning model this research uses learning with a long period of time and adjustment with more balls.

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